

Supercorrections: How They Work

Philosophy: Tests are your chance to show me what you know. While I do need to see what you can do in an unassisted, timed environment, I am most interested in seeing your mathematical thinking and reasoning- which often occurs when the stress of a test situation is removed. Supercorrections are your chance to show me your best mathematics- correct, insightful, and clearly communicated. In addition, many students form new insights while taking a finely crafted test and then going back over their mistakes; Supercorrections build this learning into the assessment process.

Steps:

1. Take the timed test, turn it in, have it marked right/wrong, receive it back.
2. Look over your mistakes- which ones are the careless (d'oh!) type and which are more serious? If you're not sure what you did wrong, talk with a friend, see Mr. O'Brien, check your textbook or notes, go to the internet, etc. Feel free to write on your test paper in pen, but don't change any of your original work or add anything in pencil (I keep scanned copies of all the tests in case I need to make sure nothing has been changed).
3. Grade each question on your test based on the following rubric:

0	1	2	3	4
Very little work or blank	Reasonable attempt but significant conceptual error(s)	Has some correct work but has a conceptual error	Has correct work with a minor conceptual error or careless error	All correct (a correct question automatically gets another 4 points for a total of 8)

4. For each question that you missed, record your score from the above rubric on the Supercorrection form and then re-do the problem. Be sure to show every step- when you have unlimited time to do a problem, I expect excellently presented work!
5. Write an explanation to go with your solution. Convince me that you now understand the concept- connect to previous homework, notes, etc. Be sure to explain the error that you made. The lower your original score on the problem, the more thorough your explanation needs to be!
6. Hand in your test paper and Supercorrection forms (unstapled) to receive your final test grade. I will check your original score from the above rubric and grade your Supercorrections using the following rubric:

0	1	2	3	4
Incorrect answer	Correct answer with working	Correct answer with working and some explanation	Correct answer with working and good explanation	Correct answer with working and explanation that convinces me you understand the question and your mistake

Supercorrections: Some Tips

Most math students haven't experienced something like Supercorrections before; they require a slightly different mindset. Here are some suggestions:

- You should still prepare for tests as thoroughly as you have in the past- use the revision day, practice, memorize where necessary, ask lots of questions, and get yourself psyched up to do the best you can on test day.
- After you take your test, don't be discouraged if you end up with more wrong than right (see the example below).
- You can think of your work during the timed test as your rough draft, and now its time for the final draft- Supercorrections.
- When Supercorrecting, pay close attention to **why** you missed a problem. Resist the temptation to dismiss a mistake as "just a careless error." Ask for help- from a friend, from Mr. O'Brien, from the internet, from anywhere. Now is your last chance to master concepts from the unit's work, and if you don't, it will come back to haunt you... If your error truly is careless, think about how you could avoid such an error in the future- it's a real pain to have to write a Supercorrection for a silly mistake.
- Make sure that your correct solution is neat with each step carefully shown, and most importantly, make sure it is correct! Check your answer with someone who got the problem correct or check Mr. O'Brien's answer key. Messy work can be acceptable on a timed test but on untimed Supercorrections, it reflects lack of care and effort.
- When writing your explanation, try to make new connections where possible. For example, if you solved a problem with algebra, could you have used a graph instead? How does a problem connect to our homework or classwork? This is the most difficult part of the Supercorrection- don't hesitate to ask Mr. O'Brien for suggestions on making your corrections truly super!
- Lastly, don't forget to indicate the names of people who assisted you- I expect to see quite a few names...

An example:

Bill takes his equations test. He gets the test back, and he has 4 questions correct and 9 questions incorrect. He knew he could have worked a bit harder this unit, but a 4 out of 13 problems is a 31%- his parents will kill him! Then he remembers that the timed portion is just the rough draft- he hasn't actually earned a 31% on the test.

Bill takes a deep breath and starts to go through his test. As he looks over his mistakes, he realizes that 7 of them are actually quite careless- some multiplication errors, etc. Of the other two, one is a pretty big mistake, but he had some good ideas on the other one.

Bill works hard on his Supercorrections- he gets help from friends during class time, he makes an appointment to see Mr. O'Brien at 2:15 one day, he emails a friend in a more advanced math class, and he ends up with a wonderful set of Supercorrections.

Since each of the 13 questions is out of 8 points, there are **$13 \times 8 = 104$ points available** for the test. Before Supercorrections, Bill earned **$4 \times 8 + 7 \times 3 + 1 \times 2 + 1 \times 1 = 56$ of these points** (see the rubric for work done on timed tests). Since his Supercorrections were wonderful, he earned another **$9 \times 4 = 36$ points**. Thus, Bill's final grade is 92 out of 104 or 88% (overall, a B for the test).